

JULY 1961 — 27

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PART 2

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**NEWS
OF THE
HYDRAULICS
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**JOURNAL OF THE HYDRAULICS DIVISION
PROCEEDINGS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS**

DIVISION ACTIVITIES

HYDRAULICS DIVISION

Proceedings of the American Society of Civil Engineers

NEWS

July, 1961

THE PURPOSE OF THE HYDRAULICS DIVISION

"The advancement and dissemination of scientific and engineering knowledge in all branches of hydraulics, hydrology, hydraulic engineering and water resources. In particular this shall embrace meteorology and hydrology as the sciences dealing with the occurrence of water in the atmosphere, on the earth surface and in the ground, fluid mechanics and the understanding of all flow phenomena, applied hydraulics for the design and planning of hydraulic structures and of comprehensive systems, and those social, economic and administrative aspects basic to the conservation and utilization of water as an essential natural resource."

COMMITTEES

Water Resources Coordinating Committee

Announced in the January Newsletter, this committee, which has been on an interim basis since 1958, was advanced to a continuing status by the Board of Direction at the Boston convention. In April, the Committee on Division Activities made the following appointments to the Water Resources Coordinating Committee. Mr. Laverty and Mr. Donnan had previously served on the interim committee. The other members are new appointments.

Finley B. Laverty, Chairman (to October 1962)

C. Russell Dole, Power Division Representative (to October 1961)

William W. Donnan, Irrigation and Drainage Division Representative (to October 1961)

Herbert S. Riesbol, Hydraulics Division Representative (to October 1962)

Charles F. MacNish, Waterways and Harbors Division Representative (to October 1963)

H. Loren Thompson, Sanitary Engineering Division Representative (to October 1963)

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The purpose of this committee is "to coordinate and supervise the organization and activities which are expected to result from the very significant studies made by the Horner Committee on Water Resources; to continuously review the progress being made by the five divisions to meet the society's water resources objectives and recommend any needed revisions; organization required; to coordinate division activity in programming and presentation of technical information on water resources at conventions and conferences; to coordinate division endeavors to avoid conflict; and to determine committee structure in new areas of technical interest in the field of water supply and conservation."

The new committee held its initial meeting in Denver, Colorado, on July 10 and 11, at which the accomplishments of the interim committee, new areas of division work, needed points of coordination, and the desirability of interdivisional conference type programs were discussed.

Productivity of the Hydraulics Division

At the May 5, 1961 Des Moines, Iowa meeting of the Technical Proceedings Committee, Mr. William H. Wisely, Executive Secretary of ASCE presented a statistical analysis of the productivity of the Technical Division Committee during the 1959-60 fiscal year. He noted that the Hydraulics Division sponsored 17 sessions which included 54 papers. Sixty-one papers were published and 2 manuals were in process. Of the 14 Divisions in the Society, the Hydraulics Division was second in all these categories only to the Structural Division which had sponsored 31 sessions of 100 papers, had published 100 papers, and had 4 manuals either published or in preparation.

TENTH HYDRAULICS DIVISION CONFERENCE Gregory Hall Auditorium, University of Illinois Urbana, Illinois August 16-18, 1961

Your co-hosts, the Central Illinois Section, ASCE, and the University of Illinois, have arranged the following well rounded social and technical program for the conference. Note that there are a few changes to the schedule that appeared in the May issue of the Hydraulics Division Newsletter. All times shown are Central Daylight Savings Time. The following people are on the Local Committee on Arrangements: William C. Ackermann, co-chairman; Ven Te Chow, co-chairman; Wallace M. Lansford, co-chairman; Marilyn Clark, Housing; John C. Guillou, Transportation; Harold W. Humphreys, Electricity; Murray B. McPherson, Technical Program Facilities; William D. Chell, Finances; Wyndham J. Roberts, Ladies and Children; James M. Robertson, Registration; and John B. Stall, Entertainment and Hospitality.

Advance Information on Attendance

To help in planning adequate facilities, the conference Planning Committee requests notification, as soon as possible, of your plans for attendance. If you have not already done so, please fill in the "Advance Reservation Requests" form, which appears later in this issue of the Newsletter, and mail it to Professor James M. Robertson, 125 Talbot Laboratory, University of Illinois, Urbana, Illinois.

ion of Conference

map of Champaign-Urbana appears herewith. Routes and pertinent buildings are shown to aid you in going directly to registration headquarters with-
-lay.

trationMen's Residence Hall

Tuesday, August 15, 3:00 p.m. to 10:00 p.m.

Wednesday, August 16, 8:00 a.m. to 12:00 noon

egory Hall, Room 112

Wednesday, August 16, 8:00 a.m. to 4:00 p.m.

Thursday, August 17, 8:00 a.m. to 4:00 p.m.

Friday, August 18, 8:00 a.m. to 12:00 noon

Registration fee \$4. Ladies, children, and students, no charge.

Accommodations

Rooms in new Men's Residence Halls will be available at \$4.25 per night, single, and \$3 each per night, double. Rates for children under 12 are one-half the adult rate (no charge for children under 2 years of age). Reservations for University dormitory housing will be handled by the local committee on campus housing. You can use the "Advance Reservation Requests" form indicating your desired reservations.

Many motels and hotels are located within 5 miles of the University campus. The rates vary from \$5 to \$10, single, and from \$7 to \$12 for shared accommodations. Information on hotels and motels will be sent upon request to those who prefer this type of accommodations; however, actual reservations with hotels and motels must be made by the individual delegates to the conference.

FAMILY AND SOCIAL PROGRAMHome Hour

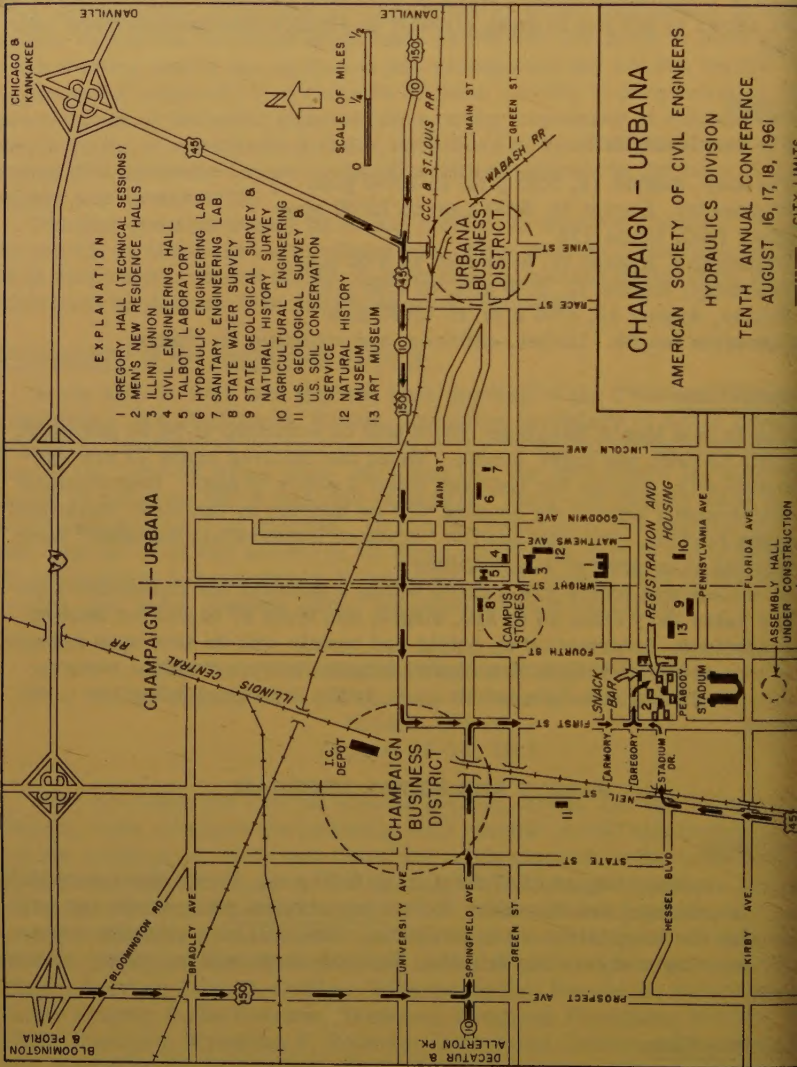
Tuesday evening, August 15, 7:00 p.m. to 9:00 p.m., Men's Residence Hall. An informal welcome hour for all registrants, their wives and children to enjoy the hospitality of the co-hosts. This will be a splendid opportunity for meeting and greeting friends. Refreshments will be coffee, cookies, and punch.

Coffee Hour

Wednesday morning, August 16, 8:30 a.m., at Men's Residence Hall Lounge.

People's Swim Party and Lunch at Champaign Park—Wednesday, August 16, 10:00 a.m.

Swimming is available at swimming pool for mothers desiring this service. Leave Snack Bar at 10:00 a.m. and 11:00 a.m. and return to Snack Bar at 1:00 p.m. A nominal charge will be made for transportation. Lunch will be purchased at the park concession.



CHAMPAIGN - URBANA

AMERICAN SOCIETY OF CIVIL ENGINEERS
HYDRAULICS DIVISION

TENTH ANNUAL CONFERENCE
AUGUST 16, 17, 18, 1961

Chicken Fry

Wednesday noon, August 16, 12:00 noon to 1:30 p.m.—\$1.50 each. See details under the technical program.

Chicken Fry

Wednesday afternoon, August 16, 4:00 p.m. to 9:00 p.m., Robert Allerton Park. This is a family event for the late afternoon and evening at a unique 100 acre park. The entire family will enjoy seeing such intriguing scenes as the Lost Garden, The Centaur, The Sun Singer, and The Garden of the Furies. This informal event includes the evening meal at the park and transportation by bus to and from the University of Illinois campus for those who need it. Buses leave the Snack Bar at 2:45 p.m., 4:30 p.m., and 5:00 p.m., and return to the University at 9:00 p.m. \$1.75 for adults and \$1 for children, including transportation and chicken fry.

Men's Coffee Hour

Thursday morning, August 17, 8:30 a.m., at Men's Residence Hall Lounge.

Men's and Young People's Campus Tour, Tennis, Golf

Thursday morning, August 17, 10:00 a.m. Play golf or tennis, or take a tour of the University animal barns.

Young People's Swim Party and Picnic at Lake of the Woods

Thursday afternoon, August 17, 3:00 p.m. Bus leaves Snack Bar at 3:00 p.m. and returns to campus at 8:40 p.m. A nominal charge will be made for transportation. The evening meal will be purchased at Park concession.

Conference Banquet

Thursday evening, August 17, 6:30 p.m., \$3.50 each. See details under the technical program.

Lincoln Tour

Friday, August 18, 8:00 a.m. to 6:00 p.m. This is an all-day tour for the adults and children to Springfield, Illinois, and New Salem State Park. The group will visit Lincoln's Home, Tomb, and the restored village of historic New Salem, where Lincoln lived and worked as a young man. The tour includes admission and transportation in air-conditioned buses. Buses leave the Snack Bar at 8:00 a.m. and return to Snack Bar at 6:00 p.m. \$5 each, including transportation and lunch.

TECHNICAL PROGRAM

Speakers' Breakfasts

Wednesday, Thursday, and Friday mornings, August 16, 17, and 18, 7:30 a.m., Men's Residence Hall Dining Room. Briefing sessions for speakers, discussors, and program officials, each Conference day. Admission by invitation only.

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July, 19

Wednesday, August 16, 9:00 a.m. Ground Water Hydrology, 112 Gregory Hall

Presiding: Maurice L. Dickinson, Chairman, Executive Committee, and William F. Guyton, Member, Committee on Ground Water Hydrology

Theoretical and Practical Aspects of Recharge through Wells, Paul Baumann, Consulting Engineer, Sierra Madre, California

Modern Well Design and Construction Procedures

Harman F. Smith, Head, Engineering Section, Illinois State Water Survey Division, Urbana, Illinois

Design and Construction of Water Wells

Owen F. Jensen, Jr., Vice President, Land Texas Company, Houston, Texas

Well Logging and Exploration Techniques

Paul H. Jones, Research Geologist, U. S. Geological Survey, Idaho Falls, Idaho

12:00-1:30 p.m. Luncheon, Men's Residence Hall Dining Room

Presiding: Maurice L. Dickinson, Chairman, Executive Committee

Welcome: Stanley H. Pierce, Associate Dean, College of Engineering, University of Illinois

Greetings: Central Illinois Section, H. C. Scheer, President

Speaker: William H. Wisely, Executive Secretary, American Society of Civil Engineers

Subject: Society Affairs

Wednesday, August 16, 2:15 p.m. Hydraulic Structures, 112 Gregory Hall

Presiding: Eugene P. Fortson, Jr., Vice Chairman Executive Committee, and Harold K. Pratt, Chairman, Committee on Hydraulic Structures

Hydrologic Design of Culverts

Ven Te Chow, Professor of Hydraulic Engineering, University of Illinois, Urbana, Illinois and Consulting Editor of Hydraulic Science and Engineering, McGraw-Hill Co., Inc., New York

Hydraulics at Conventional Highway Culverts

Herbert G. Bossy, Highway Research Engineer, Bureau of Public Roads, Washington, D. C.

Improved Inlets for Culverts

John L. French, Hydraulic Engineer, Fluid Mechanics Section, National Bureau of Standards, Washington, D. C.

4:30-9:00 p.m. Visit and Picnic at Robert Allerton Park

Monday, August 17, 8:30-9:00 a.m. Movie on Break-out of Lake George, Alaska
(Courtesy USGS)

Monday, August 17, 9:00 a.m. Surface Water Hydrology, 112 Gregory Hall

Presiding: Herbert S. Riesbol, Member, Executive Committee, and Victor A. Koelzer, Member, Committee on Surface Water Hydrology

The Economic Significance of Urban Drainage Design

William J. Bauer, Consulting Engineer and Member, Flood Control Advisory Committee, N. E. Illinois Metropolitan Area Planning Committee, Chicago, Illinois

A Comparison of Urban and Rural Runoff

John B. Stall and Harman F. Smith, Illinois State Water Survey Division, Urbana, Illinois

Analysis of Urban Runoff Hydrographs

Clint J. Kiefer, Bureau of Engineering, Department of Public Works, City of Chicago, Chicago, Illinois

Hydrology of Urban Areas

John C. Geyer, Department of Sanitary Engineering and Water Resources, the John Hopkins University, Baltimore, Maryland

Monday, August 17, 1:30 p.m. Sedimentation, 112 Gregory Hall

Presiding: Arno T. Lenz, Secretary, Executive Committee, and Peter S. Eagleson, Member, Committee on Sedimentation

Density and Distribution of Reservoir Sediments

Herman G. Heinemann, Project Supervisor, Agricultural Research Service, Lincoln, Nebraska

Relation Between Reservoir Sediment
Deposition and Selected Watershed Variables

Roger L. Corinth, Assistant Engineer,
Illinois State Water Survey Division,
Urbana, Illinois

Sediment Deposition in Small Reservoirs
Resulting from Urbanization

Harold T. Guy, Hydraulic Engineer,
George E. Ferguson, Division Hydrologist,
U.S. Geological Survey, Water Resources Division,
Washington, D. C.

Boundary Shear Stress Distribution in
Trapezoidal Channel Curves

Arthur T. Ippen, Professor of Hydraulics,
Department of Civil and Sanitary Engineering,
M.I.T., Cambridge, Massachusetts, and Philip A. Drinker,
Geologist, Agricultural Research Service,
Assigned to Hydrodynamics Laboratory,
M.I.T., Cambridge, Massachusetts

6:30 p.m. Convention Banquet, Illini Union Ballroom

Presiding: Maurice L. Dickinson, Chairman,
Executive Committee

Speaker: Mr. Floyd E. Dominy, Commissioner,
Bureau of Reclamation, Department of the Interior,
Washington, D. C.

Subject: "A Challenge to the Hydraulic Engineer"

Friday, August 18, 9:00 a.m.

Hydromechanics Session—Cavitation in
Hydraulic Structures, 112 Gregory

Presiding: Eugene P. Fortson, Jr., Chairman,
Executive Committee, and Frederick R. Brown,
Member, Committee on Hydromechanics

Problems Created by Cavitation Phenomena

Frederick R. Brown, Civil Engineer,
Chief, Hydrodynamics Branch, Waterways Experiment Station,
Vicksburg, Mississippi

Mechanics of Cavitation

Virgil E. Johnson, Research Engineer,
Hydronautics, Inc., Rockville, Maryland

Scale Effects Involved in Experimental Work

James M. Robertson, Professor of Theoretical and Applied Mechanics, College of Engineering, University of Illinois, Urbana, Illinois

Design Procedures

Donald Colgate, Engineer, U. S. Bureau of Reclamation, Denver, Colorado, and Rex A. Elder, Head, Hydraulic Laboratory, Tennessee Valley Authority, Knoxville, Tennessee

ay, August 18, 1:30 p.m.

Hydrometeorology and Flood Control, 112 Gregory Hall

Presiding: Herbert S. Riesbol, Member, Executive Committee, and Wyndham J. Roberts, Member, Committee on Hydrology

Joint Flood Control Operating Center of the State of California, U. S. Corps of Engineers, and U. S. Weather Bureau

Carl A. Werner, Principal Hydraulic Engineer, State Department of Water Resources; Ronald H. Thompson, Chief of Operations, Sacramento District, Corps of Engineers; A. L. Zimmerman, Supervising Meteorologist-Hydrologist, U. S. Weather Bureau, Sacramento, California

Studies of Hydrometeorological Factors Influencing Severe Rainstorms on Small Watersheds

Glenn E. Stout, Head of the Meteorology Section, and Floyd A. Huff, Meteorologist, Illinois State Water Survey Division, Urbana, Illinois

Present Status and Future Utilization of Radar, Meteorological Satellites and Quantitative Precipitation Forecasts in the Field of Hydrology

Richard D. Tarble, David W. Holmes and Jerrold A. LaRue, Meteorologists, U. S. Weather Bureau, Washington, D. C.; Mr. Tarble will make the presentation.

4:00-6:00 p.m. Radar Meteorology Laboratory tour, Illinois State Water Survey Division, University of Illinois Airport

4:00-6:00 p.m. Laboratory open house. The hydraulic laboratories of the Civil Engineering Department, Theoretical and Applied Mechanics Department, and the Illinois State Water Survey will be open for informal visits

Saturday, August 19, 8:00 a.m.-noon Water Supply and Drainage Tour, U.S. Industrial Chemicals Company, Tuscatula, Illinois. \$2 each

GENERAL NEWS

New York Convention

The October 16-20, 1961 ASCE convention will be held in New York City. The Hydraulics Division will sponsor two Hydromechanics sessions, one on Wave Mechanics and one on General Topics, and one session each on Hydraulic Structures and Tidal Hydraulics.

1962 Conventions and Conference

Considerable interest is being shown in the Executive Committee's plans for Hydraulics Division participating in the 1962 conventions at Houston, Omaha, and Detroit, and in the Sacramento Hydraulics Division Conference. The Water Resources Coordinating Committee has suggested that the theme for the Omaha Convention be "Water Resources" and the theme for the Detroit Convention be "Transportation." If these plans carry through, the Hydraulics Division will sponsor very few, if any, of the sessions at the Detroit Convention, but will be a major sponsor of much of the Omaha Convention. It is expected that the Hydraulics Division will also sponsor the usual four sessions at the Houston Convention, and, of course, all of the six sessions at the Sacramento Hydraulics Division Conference.

Personnel

CHARLES W. THOMAS, F., ASCE, Head, Hydraulic Investigations Section, Bureau of Reclamation, Denver, Colorado, left in April for a 1-year assignment with the United Nations on an international eight-man team which will study the island of Formosa's water resources. The study is being sponsored by the Bureau of Technical Assistance Operations of the United Nations. Thomas will advise senior Chinese engineers in the development of hydraulic laboratory facilities, in the techniques of model design, construction, testing and interpretation, in the methods of controlling sediment in reservoirs and canals, stabilizing channels, and preventing scour, and in the formulation of an island-wide survey for sediment observations.

Hawaii Water Legislation

A Bill to provide for the continuance of an Act relating to ground water sources for the State of Hawaii has passed both houses of the State Legislature and is expected to be signed into law by the Governor. This Bill updates a former ground water control bill which passed the Territorial Legislature in 1959 and has been revised to reflect Statehood and government reorganization. The Act provides for control of ground water in areas considered to be critical.

Bill relating to the capping of artesian wells in the State of Hawaii has been passed by both houses of the State Legislature. This Bill has been in effect for many years but is now being revised to reflect Statehood and government reorganization. By this law, all leaking artesian wells are required to be capped, by the owner of the land or by the government.

Flood control Bill has been passed by the State Legislature which clearly designates the Department of Land and Natural Resources as the State agency responsible for the coordination of flood control matters. This Department is also responsible for State water problems, and flood control responsibilities which are inherently related to the conservation of water, have been transferred to this Department.

NEW PUBLICATIONS

The following is a bibliographical listing of separate publications (as opposed to papers in technical journals) which are recommended by some members of the Division as being of value to the interests of the Hydraulics Division and which do not appear in other lists which are widely distributed among hydraulics men (for example citation will not be made to articles or announcements in "Civil Engineering," in the indexes published by the U. S. Government Printing Office, or in other similar lists). Inclusion or noninclusion of a citation in the list does not imply any degree of endorsement by the Hydraulics Division or your editor. Citations for inclusion in this current list were made by Dr. D. K. Todd (36) and Professor R. K. Linsley (2). All members are encouraged to submit appropriate and complete recommendations to the list. If appropriate, also include the sale price of the publication. Comments regarding this listing will be appreciated.

1. Clean water—A challenge to the Nation, Publ. No. 816, U. S. Public Health Service, Washington, D. C., 41 pp., 1960.

2. Industrial water use in Ohio, Ohio Water Commission, Columbus, 1961, 10 pp., 1961.

3. Interstate-Federal compact for the Delaware River basin, Delaware River Basin Advisory Committee, Philadelphia, Penna., 27 pp., 1961.

4. Intrusion of salt water into ground water basins of Southern Alameda County, Bull. 81, California Department of Water Resources, Sacramento, 1960, 10 pp., 1960.

5. Is "Primary Water" or "Rock Fissure Water" a potential source of water supply?, Information Bull., California Department of Water Resources, Sacramento, 13 pp., 1960.

6. Large-scale ground-water development, United Nations Water Resources Development Centre, New York, 84 pp., 1960.

7. Lower San Joaquin Valley water quality investigation, Bull. 89, California Department of Water Resources, Sacramento, 1960.

8. Plant-water relationships in arid and semi-arid conditions, vol. 15, Zone Research, UNESCO, Paris, 225 pp., 1960.

9. Proceedings, The National conference on water pollution, U. S. Public Health Service, Washington, D.C., 607 pp., 1961.

10. Anon., Return irrigation water—characteristics and effects, U. S. Public Health Service, Portland, Oregon, 120 pp., 1960.
11. Anon., Third quarterly report—The study of the potential application of radioisotope technology to water resource investigations and utilization, Isotopes, Inc., Westwood, N. J., 87 pp., 1961.
12. Anon., Water policy and legislative recommendations, Ohio Water Conservation Commission, Columbus, 45 pp., 1961.
13. Assembly Interim Committee on Water, Saline Conversion and nuclear energy, California Legislature, 29 pp., 1961.
14. Baker, D., and R. K. Linsley, The Felt Lake Evaporation Study, Technical Report No. 5, Stanford University, Department of Civil Engineering, 1960, pp., 1960.
15. Bookman, Edmonston, and Giannelli, Annual survey report on groundwater water replenishment, 1961, Central and West Basin Water Replenishment District, Downey, California, 64 pp., 1961.
16. Chen, T. C., Experimental study on the solitary wave reflection along a straight sloped wall at oblique angles of incidence, Institute of Engineering Research Rep. 89-5, University of California, Berkeley, 29 pp., 1960.
17. Committee on Science and Astronautics, Research needs for salt water conversion, House of Representatives, U. S. Congress, Washington, 214 pp., 1961.
18. Deutsch, M., Effects of dissemination of Radioactive materials on water resource conservation with special reference to Michigan, Water Bulletin, Michigan State Univ. Agric. Exp. Sta., 35 pp., 1960.
19. Eldridge, E. F. (editor), Proceedings, Symposium on water pollution research, 8th—Radioactive waste problems in the Northwest, U. S. Public Health Service, Portland, Oregon, 77 pp., 1960.
20. Eldridge, E. F. (editor), Proceedings, Symposium on water pollution research, 7th—Water problems in watersheds of the Northwest, U. S. Public Health Service, Portland, Oregon, 57 pp., 1960.
21. Gray, R., Industrial water demand—Point Remove Creek watershed of Arkansas Coll. of Business and Administration, 28 pp., 1960.
22. Hart, W. E., Jet discharge into a fluid with a density gradient, Institute of Engr. Research Rep. 138-4, University of California, Berkeley, 66 pp., 1960.
23. Hendricks, D. W., and C. C. Warnick, A study of the control of canal seepage, Prog. Rep. No. 1, Spl. Res. Proj. No. 20-D, University of Idaho, Exp. Sta., Moscow, 44 pp., 1960.
24. Humphrys, C. R., Evapotranspiration bibliography, Water Bulletin 7, Michigan State Univ. Agric. Exp. Sta., 33 pp., 1961.
25. Jacob, C. E., Groundwater and drainage of Yuma Valley and contiguous areas, Yuma County Water Users' Assoc., Yuma, Ariz., 50 pp., 1961.
26. Johnson, J. W. (editor), Proceedings, Seventh conference on coastal engineering, The Hague, Netherlands, August 1960, Council on Wave Research, Berkeley, Calif., 1001 pp., 1961.

- Johnson, J. W., and H. C. Hwang, Mixing and dispersion by wind waves, Inst. of Engr. Research Rep. 138-5, Univ. of California, Berkeley, 9 pp., 1961.
- Krone, R. B., Third annual progress report on the silt transport studies utilizing radioactive isotopes, Hydraulic Laboratory and Sanitary Engr. Res. Laboratory, Univ. of California, Berkeley, 52 pp., 1960.
- Krone, R. B., Methods for tracing estuarial and sediment transport processes, Hydraulic Laboratory and Sanitary Engr. Res. Laboratory, Univ. of California, Berkeley, 57 pp., 1960.
- Meyboom, P., Geology and groundwater resources of the Milk River sandstone in Southern Alberta, Memoir 2, Alberta Research Council, Edmonton, Canada, 89 pp., 1960.
- Schmid, A. A., Evolution of Michigan water laws—response to economic development, Circ. Bull. 227, Michigan State University, Agric. Exp. Sta., 34 pp., 1960.
- Senate Fact Finding Committee on Water Resources, Budgets, reports, local assistance for state water developments—a partial report, California Legislature, Sacramento, 100 pp., 1961.
- Shen, H. W., A study on meandering and other bed patterns in straight alluvial channels, Water Resources Center Cont. No. 33, University of California, Berkeley, 68 pp., 1961.
- Tasai, F., On the damping force and added mass of ships heaving and pitching (trans. by W. C. Lin), Institute of Engr. Research 82-15, University of California, Berkeley, 24 pp., 1960.
- University of Oklahoma Research Institute, Demineralization of saline water by electrically-induced adsorption on porous graphite electrodes, Research and Dev. Prog. Rep. No. 45, U. S. Office of Saline Water, Washington, D. C., 48 pp., 1960.
- Vasley, R. J., Hydrodynamics of Flow into Curb Opening Inlets, Tech. Report No. 6, Stanford University, Department of Civil Engineering, 108 pp. plus appendices, 1960.
- Wegel, R. L., Wind waves and swell, Inst. of Engr. Research Rep. 138-3, University of California, Berkeley, 1960.
- Williams J. A., Verification of the Froude modeling law for hydraulic breakwaters, Inst. of Engr. Research Rep. 114-11, University of California, Berkeley, 22 pp., 1960.

FOR YOUR CALENDAR

Meetings

- | | |
|-----------------|--|
| Oct 16-18, 1961 | Hydraulics Division Conference, Urbana, Illinois |
| Nov 16-20, 1961 | ASCE, New York Convention |
| Dec 19-23, 1962 | ASCE, Houston Convention |

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July, 1

May 14-18, 1962

ASCE, Omaha Convention

August, 1962

Hydraulics Division Conference, Sacramento, California

October 8-12, 1962

ASCE, Detroit Convention

February 25-March 1, 1963

ASCE, Atlanta Convention

May 20-24, 1963

ASCE, Milwaukee Convention

Non-ASCE Meetings

August 7-11, 1961

1961 Western Resources Conference.
Theme: Land and Water Planning
Economic Growth. Sponsored by
University of Colorado, Colorado State
University, and Colorado School of
Mines

September 3-7, 1961

Ninth IAHR Convention, Belgrade,
Yugoslavia

September 6-8, 1961

Seventh Midwestern Conference on
Mechanics and Soil Mechanics, Michigan
State University, East Lansing
Michigan

June 18-21, 1962

Fourth National Congress of Applied
Mechanics, University of California
Berkeley, California

USE OF THE HYDRAULICS DIVISION NEWSLETTER

You are urged to use the Division Newsletter for announcements, inquiries, personnel news, committee reports, surveys and other items of interest to Division members. A short note summarizing the highlights of committee meetings is particularly requested. Suggestions for improvement of the Newsletter will be appreciated. All contributions are appreciated.

Deadline dates for Newsletter contributions: September 1961 issue—June 20; November 1961 issue—September 20.

Fred A. Bertle
4475 Carr Street
Wheat Ridge, Colorado

ADVANCE RESERVATION REQUESTS 1961 ASCE HYDRAULICS DIVISION CONFERENCE

Please use the following form to notify the Conference Planning Committee of your plans for attendance at the Hydraulics Division Conference, August 16-18, 1961. The form can also be used for requesting University Dormitory Reservations.

1961 ASCE HYDRAULICS DIVISION CONFERENCE

Advance Reservation Requests

Name _____ Company _____

Address _____

Accompanied by: wife ☐, boys _____, girls _____, others _____
(Indicate ages, please)

Arrival date and time: _____, via: _____, departure: _____

Housing request: Dormitory Reservations ☐ Hotel and Motel Information ☐ (check one)

Number planning to attend special events:

Luncheon (16th) @ \$1.50 ☐Lincoln Tour (on 18th) @ \$5.00 ☐Allerton, Adults @ \$1.75 ☐Water S. & Drain. Tour (19th) @ \$2.00 ☐Children @ \$1.00 ☐

Young Peoples Events (swim, etc.)

Banquet (17th) @ \$3.50 ☐on 16th ☐, on 17th ☐

BACK ISSUES OF THE DIVISION JOURNALS

are in such demand that staff headquarters finds itself without a complete record set. Such a set is being assembled for the ASCE Publications Record Room at the United Engineering Center, soon to be dedicated in New York City. The record set of Proceedings reprints is complete; but the Journal file lacks many issues, as follows:

1956

Transport. May
 Planning February, May
 Irrigation and Drainage. February
 Sewerage February, April, June
 Surveying and Mapping March
 Rivers and Harbors April

Members who can spare any of the foregoing copies will be doing a service to the Society by mailing them to Harold T. Larsen, ASCE, Room 1607, 33 West 42nd Street, New York 18, New York.

TO ASCE MEMBERS OF CHI EPSILON

Chi Epsilon Fraternity, national civil engineering honor society, has officially offered to supply the funds necessary to furnish a formal Conference Room at the United Engineering Center. This room will be on the ASCE executive floor, will be named "The Chi Epsilon Room," and will be available for Conference and committee meetings.

Endowments are not expected, but single voluntary gifts, from members and friends of the Fraternity are earnestly solicited. An attractive Commemorative Book has been planned in which donors of \$100 or more (singly or in groups) may inscribe the name of a revered person.

On request, the national chairman, Samuel Kramer (8701 Shore Road, Brooklyn 9, New York) will be glad to mail a descriptive brochure. Your gift is tax deductible if you make your check out to "ASCE CHI EPSILON RO FUND" and mail it to Mr. Donald D. King, ASCE, 33 West 39th Street, New York 18, N. Y. Your gift will be automatically credited to the quota of your initiating Chapter. The national goal is \$10,000.

SYMPOSIUM ON STILLING BASINS AND ENERGY DISSIPATORS

In answer to a need to make available in one volume a series of papers on Stilling Basins and Energy Dissipators (from the Journal of the Hydraulics Division), Proceedings Symposium No. 5 has been prepared.

This 312 page book contains eight informative papers and all of their discussion. The paperbound volume is available at a price of \$6.00 with the usual 50% discount to Society members and public and school libraries.

CUT HERE

American Society of Civil Engineers
33 West 39th St., New York 18, N. Y.

Please send.....copy(s) of the Symposium
on Stilling Basins and Energy Dissipators.

I am.....I am not.....a member of ASCE.

The amount enclosed is \$.....

Name.....
(Please Print)

Address.....

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